

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/553,766 Confirmation No. 1396
Applicant (s) : Henk H. Hagen et al.
Filed : August 24, 2006
TC/A.U. : 1713
Examiner : Roberto Rabago
Title : COPOLYMERS OF ETHYLENE AND 1-HEPTANE

Docket No. : 62403A
Customer No. : 00109

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE

Responsive to the Official Action dated 05/31/2007, please amend the claims as detailed hereinafter and reconsider the claims in view of the arguments presented hereinafter.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 4 of this paper.

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A copolymer comprising units derived from ethylene and 1-heptene wherein the peak force at break per millimeter of film thickness P of a blown film made of the copolymer satisfies the following relationship:

$$P > 1.9 C - 127 \quad (1)$$

wherein P is expressed in N/mm and determined on a 50 micrometer thick blown film according to ASTM-D5748-95 ; and

C is given by the relationship $C = D(1 - \text{CFW})$, wherein D is the density of the copolymer measured in kg/m^3 according to ASTM-D-792 and CFW is the weight fraction of the copolymer having a crystallization point of 75°C or higher as determined using crystallization analysis fractionation, and C is greater than or equal to 550.

2. (original) The copolymer of claim 1 wherein P satisfies the following relationship:

$$P > 2.7 C - 563 \quad (1a)$$

wherein P and C have the same meanings as in formula 1 in claim 1.

3. (previously presented) The copolymer of claim 1 wherein P satisfies the following relationships:

$$P > 3.4 C - 944 \quad (1b)$$

wherein P and C have the same meanings as in formula 1 in claim 1.

4. (original) A copolymer according to any of the claims 1-3 wherein the density D is from 890 to 935 kg/m^3 and the melt index as measured according to ASTM-D-1238 Procedure A, Condition E at $190^\circ\text{C}/2.16 \text{ kg}$ is from 0.3 to 25 g/10 min.

5. (original) A copolymer according to claim 4 wherein the density D is from 895 to 930 kg/m^3 .

6. (original) A copolymer according to claim 5 wherein the density D is from 901 to 928 kg/m³.
7. (currently amended) A copolymer according to ~~any of the claims 4-6~~ claim 4 wherein the melt index is from 0.5 to 10 g/10 min.
8. (previously presented) A copolymer according to any of the claims 1-3 wherein the fraction CFW is from 0 to 0.5.
9. (previously presented) A composition comprising a copolymer of any of the claims 1-3.
10. (previously presented) An article prepared from or containing a copolymer of any of the claims 1-3.
11. (original) An article of claim 10 which is a film.
12. (previously presented) An article of claim 11 which is a packaging film.

REMARKS/ARGUMENTS

The above amendment to Claim 7 is to remove concerns related to multiple dependent claims depending from another multiple dependent claim. As such, no new matter is presented, and so it is respectfully submitted that the amendments are proper.

The Examiner has also objected to Claims 7-12 as being improper form for improper multiple dependency. These problems have also been addressed in the above amendment. As Claims 7-12 all depend from an allowed claim, it is respectfully submitted that they too are now in condition for allowance.

Accordingly, the Applicants now courteously request a notice of allowance be issued for all of Claims 1-12.

Respectfully submitted,

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